

## Severe Weather Safety in Eastern New York and Western New England

**April 26 through May 2** is Severe Weather Awareness Week in eastern New York and Western New England. The National Weather Service would like to take this time focus on preparedness and safety and discuss ways in which you can receive information to help you avoid severe weather hazards.

Here in eastern New York and western New England most severe weather occurs in May through September and during the afternoon and evening hours, but severe storms can occur year-round and at all hours. Although tornadoes and large hail happen infrequently, damaging wind gusts from thunderstorms happen much more frequently. Thunderstorms also cause heavy downpours which can lead to ponding of water in low-lying areas and destructive flash floods.

While not all thunderstorms contain severe weather, all thunderstorms contain deadly lightning.

***Lightning is our most frequently occurring summer weather hazard.*** Across the U.S., New York ranks 7<sup>th</sup> in fatalities from lightning (1959-2018). When thunder roars, go indoors!

Severe weather rarely happens without any warning. Outlooks are issued to identify broader areas with the potential for the development of severe weather. *It is your responsibility* to check the weather forecast, to see if you are, or will be, under a risk of severe weather or lightning. This becomes particularly important if you expect to spend the day outside, far from shelter, or on a boat.

Thunderstorm safety information can be found at:

[www.weather.gov/wrn/spring2020-thunderstorm-sm](http://www.weather.gov/wrn/spring2020-thunderstorm-sm)

Lightning safety information can be found at:

[www.weather.gov/wrn/summer2019-lightning-sm](http://www.weather.gov/wrn/summer2019-lightning-sm)

Everyone should have a severe weather plan. You can start putting together a plan by discussing these four questions with your family, friends or household.

1. How will I receive emergency alerts and warnings?
2. What is my shelter plan?
3. What is my evacuation route?
4. What is my family/household communication plan?

More information on creating hazardous weather plans can be found at: [www.ready.gov/plan](http://www.ready.gov/plan)

Technology has made it easy to get alerts. There is still the old stand-by; NOAA Weather Radio, and many TV and radio stations also broadcast severe weather warnings, but smartphones and computers also provide ways to receive severe weather and lightning alerts. A list of severe weather alerting apps can be found at: [www.weather.gov/enterprise/sw-alerts-app-1e](http://www.weather.gov/enterprise/sw-alerts-app-1e) The National Weather Service in Albany reminds you that we are on social media and our weather alerts are also sent via Twitter.

If you have any questions, please let us know. We hope you stay safe and well this summer.

## **Severe weather terms and definitions:**

**Severe Thunderstorm:** A thunderstorm that produces a tornado, **winds of at least 58 mph** (50 knots), and/or **hail at least 1" in diameter**. Structural wind damage may imply the occurrence of a severe thunderstorm.

**Tornado:** A tornado is "a violently rotating column of air, pendant from a cumuliform cloud or underneath a cumuliform cloud, and often (but not always) visible as a funnel cloud." The NWS Storm Prediction Center tornado FAQ is found at: [www.spc.noaa.gov/faq/tornado/](http://www.spc.noaa.gov/faq/tornado/)

**Thunderstorm Outlooks** display up to six different color categories to reflect the likelihood of occurrences and/or increased severity of a severe weather events. More information can be found at: [www.spc.noaa.gov/misc/about.html#Severe%20Weather%20Risks](http://www.spc.noaa.gov/misc/about.html#Severe%20Weather%20Risks)

### **Watch:**

When conditions become favorable for organized severe thunderstorms or tornadoes to develop, the NWS issues a Severe Thunderstorm or Tornado Watch. The Storm Prediction Center's goal is to issue watches shortly prior to the development of severe thunderstorms and tornadoes, around 1 hour for a Severe Thunderstorm Watch and 2 hours for a Tornado Watch. **A watch is not a warning**, and should not be interpreted as a guarantee that there will be severe weather.

### **Warning:**

This is issued when either a severe thunderstorm is indicated by the WSR-88D radar or a spotter reports a tornado, hail one inch or larger in diameter and/or measured winds equal or exceed 58 miles an hour; therefore, people in the affected area should **seek safe shelter immediately**.

## **Flash Flood Terms and Definitions:**

### **Flash Flood:**

A flood caused by heavy or excessive rainfall in a short period of time, generally less than 6 hours. Sudden downpours from thunderstorms can rapidly change the water levels in a stream and turn small waterways into violent, raging rivers. A recent example were the devastating flash floods that occurred in the West Canada Creek and Upper Mohawk River basins October 31-November1, 2019. Urban areas are also prone to flash floods due to the large amounts of concrete and asphalt surfaces that do not allow water to penetrate into the soil easily. Also, a dam failure can cause a flash flood.

### **Flash Flood Watch:**

Issued to indicate current or developing hydrologic conditions that are favorable for flash flooding in and close to the watch area, but the occurrence is neither certain or imminent. Flash Flood Watches may be issued a day prior to rain falling.

### **Flash Flood Warning:**

Issued to inform the public, emergency management, and other cooperating agencies that flash flooding is in progress, imminent, or highly likely.

Additional information on floods and flood safety can be found at: [www.weather.gov/safety/flood](http://www.weather.gov/safety/flood)